LAINOX®

USER'S MANUAL

COMBINATION OVEN WITH STEAM GENERATOR

ME-MG

M / X **VERSION**

EN

Technical service

00000000rev00

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ELECTRIC MODELS		GAS MODELS	
ME 106	ME C24	MG 106	MG C20
ME 110	ME S40	MG A06	MG S24
ME 210	ME C40	MG 110	MG C24
ME 211	ME 227(1)	MG A10	MG S40
ME S20		MG 210/211	MG C40
ME C20		MG A21/A22	MG 227(1)
ME S24		MG S20	

(1) All versions of model M. 227 . have two independent ovens.

VERSION

M Standard electromechanical devices with manual controls and humidifier.

X Standard electromechanical devices with manual controls, humidifier and core probe.

The manufacturer accepts no liability for any inaccuracies in this manual attributable to printing or copying errors. We reserve the right to modify our products as we deem fit, without impairing their basic features.

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1 • GENERAL REMINDERS

Repairs may become necessary over time; these and all major servicing operations must be entrusted exclusively to a Lainox technician or a Lainox authorized service agent.

1.1 • **Carefully read** the directions given in this manual; they contain important information on safety during installation, operation and maintenance.
Keep the manual in a safe place for future consultation!

1.2 • This appliance must be put only to the use **for which it is specifically intended,** i.e. cooking foods. Any other type of use is improper and therefore dangerous.

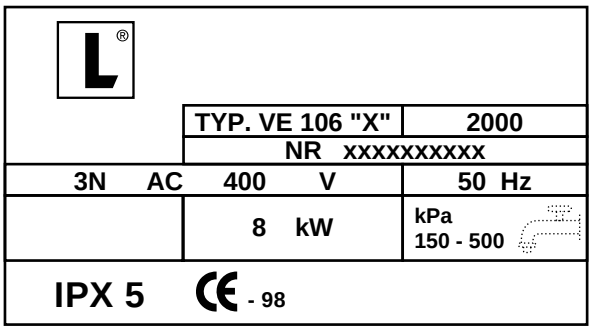
1.3 • Only trained kitchen staff should be allowed to use the appliance.

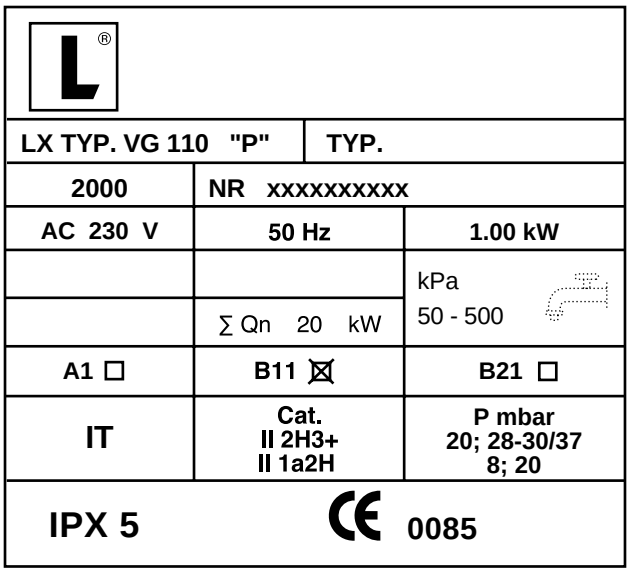
1.4 • The oven must not be left unattended during operation.

1.5 • There are surfaces of the oven that become hot during operation. Take care!

1.6 • Ask the installer for information on correct operation and use of the water softener; incorrect or incomplete regeneration of the resins will result in inadequately treated water, which could damage the oven.

1.7 • Should it become necessary to call out a service technician, all essential identification details of the appliance are shown on the data plate.





1.8 • In the event of technical assistance being required, **the trouble must be described in as much detail as possible**, so that a service technician will be able straight away to understand the nature of the problem.

1.9 • **The room** in which the oven is to operate **must be well ventilated!**

1.10 • In the event of breakdown or faulty operation, **switch off the oven immediately!**

2 • POINTS TO REMEMBER

2.1 • Before any food is cooked in a new oven, the interior must be thoroughly cleaned (see the *"Daily Cleaning"* heading).

2.2 • At the end of the working day, clean the oven thoroughly inside and out; this will ensure smooth operation of the appliance and prolong its useful life.

2.3 • **Do not use high pressure water jets when cleaning the oven!**

2.4 • For daily cleaning, **use non-corrosive products** (alkali based) suitable for the purpose. Abrasive materials and products should not be used as they will damage the surfaces.

2.5 • Always switch off the appliance when work is finished, and shut off all energy supplies (electricity, water, and gas if connected).

2.6 • **Avoid** any operation that might cause cooking **salt to be deposited** on the steel surfaces of the oven; if salt is accidentally spilled, rinse off immediately and thoroughly.

2.7 • After steam cooking, **open the door carefully** to avoid being hit by the rush of residual steam escaping from the oven. Failure to observe this warning may be dangerous for the operator.

2.8 • To ensure safe operation of the oven **do not obstruct the vents or any other opening in the casing!**

2.9 • **To ensure long term efficiency and reliability of the oven, major servicing should be carried out at least once a year. With this in mind, customers are recommended to sign a service agreement.**

Failure to observe basic safety guidelines may jeopardize the smooth operation of the oven and expose the operator to serious danger!
The manufacturer accepts no liability if the original function of the oven is altered or there is tampering or failure to observe the instructions given in the manuals.

3 • DESCRIPTION OF KEYS

FOREWORD

This page describes the immediate response keys (which, at any moment, activate the additional services available, provided that the oven is working).

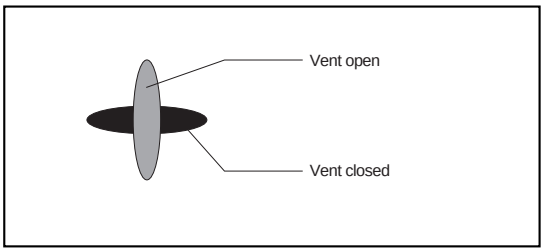
3.1 • IMMEDIATE RESPONSE FUNCTIONS

Humidification key.

Pressing key **38** sprays water into the oven, increasing the humidity level. The flow of water lasts as long as the key is pressed. It is useful for foods that require added humidity when cooking.

Open oven vent valve.

Turning valve **39** opens or closes the vent. This function is useful for products that release a lot of moisture when cooking. It is recommended not to use this function when steam cooking.



Oven light key.

Pressing key **29** switches on the oven light, permitting the operator to check the progress of the cooking.

4 • STARTING COOKING

OPERATIONS

4.1 • SELECT

Turn knob **41** to select the cooking mode: convection **42**, steam **43**, combination **44**.

4.2 • SET

Set the cooking temperature with knob **18**.

4.3 • SETTING - START

Set the cooking time with knob **21**.
At this point the oven begins cooking.

Or

you can set the cooking temperature regulated by the core probe in the product:
- press key **46**, to activate the function;
- press keys **23**, to set the required temperature, which will appear on the display.

At this point the oven begins cooking.

4.4 • END OF COOKING

If infinite time **[∞]** has been selected, switch off the oven manually using key **41** for setting the cooking mode.
If a cooking time or core probe temperature has been entered, a beep will be generated when the time expires or the temperature has been reached, to indicate that cooking has terminated and the oven has switched itself off. To interrupt the signal, simply open the oven door.
Remove the food from the oven, following the directions given under paragraph 2.7 of the *"Points to remember"* heading.

GAS MODELS ONLY
(MG 106, MG A06, MG 110, MG A10, MG 210/211, MG A21/A22 AND MG 227)
When key **40** lights up, this means that the burners are inhibited. Press the key to reset ignition.

5 • OVEN OPERATION

OPERATIONS

5.1 • MAIN SWITCH AND KNOB ALLOWING SELECTION OF COOKING MODE AND COOLING WITH OVEN DOOR OPEN

To switch on the oven turn the knob **41** onto the required cooking mode:

42 convection

43 steam

44 combination

The indicator light above knob **41** comes on to show that the oven is powered up.

To cool the oven quickly, open the door and turn the knob onto the symbol **45**. This activates the fan, which rapidly lowers the temperature in the oven. This function can be used when the next product to be cooked requires a much lower oven temperature.

5.2 • TEMPERATURE SETTING KNOB

Use knob **18** to set the preheat temperature with the oven empty, or the required cooking temperature.

When the set temperature is reached in the oven, the indicator light located near the knob will go out. The temperature in the oven is shown on the thermometer above the cooking mode selector.

The light indicates the operation of the thermostat control:

if the indicator is alight, the heating elements or burners are OFF;

if the indicator is not alight, the heating elements or burners are OFF.

5.3 • COOKING TIME SETTING KNOB

Use knob **21** to set the required cooking time. When cooking is not controlled by time, position the knob on infinite **[∞]**.

The oven will not come into operation until this final setting has been made.

If a set cooking time has been selected the oven will switch itself off when the time elapses and emit a beep; this can be interrupted either by opening the door or by switching off the oven. Whereas, if infinite time has been selected **[∞]**, the oven must be switched off manually, by returning the knob to the zero position.

When the indicator is alight, the oven is in operation.

GAS MODELS ONLY
(MG 106, MG A06, MG 110, MG A10, MG 210/211, MG A21/A22 AND MG 227)

When key **40** lights up, this means that the burners are inhibited. Press the key to reset ignition.

6 • COOKING WITH THE CORE PROBE (version X only)

Warning
When cooking with this accessory, the timer function can not be used!

Plug the probe connector into the panel socket **(36)**. Insert the probe into the food (see also illustrations in the next heading).

1 • Select the cooking mode, as described in previous headings;
2 • Set the required oven temperature;
3 • Press key **46** to activate the function;
4 • Set the core temperature using the keys **23**; the selected temperature will remain in the display for a few seconds. Once this time has elapsed, the same display will show the actual core temperature.
5 • As soon as the temperature at the core of the product reaches the selected value the oven will switch itself off and emit a beep, which can be interrupted either by opening the door or by switching off at the controls.

Displaying the set time during cooking
If the set core temperature needs to be checked during cooking, proceed as follows:

6 • Press momentarily any one of the keys **23**;
7 • The set temperature value will appear in the display for approximately 3 seconds, after which the actual temperature at the core of the product returns automatically.

Changing the set value during cooking
If the value set at the start of cooking needs to be changed (increased or decreased), proceed as follows:

8 • Press and hold key **[+] 23** for at least 2 seconds if the value needs to be increased, or key **[-] 23** if it needs to be decreased;
9 • Release the key as soon as the required temperature appears on the display;
10 • After a few seconds, the display will revert automatically to the actual core temperature.

When using the core probe, make certain it is properly connected to the panel.
When the core probe is not being used, replace the probe in its case and make sure the safety cap is fitted correctly.

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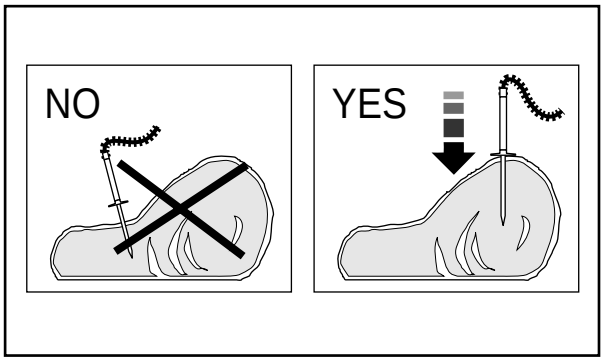
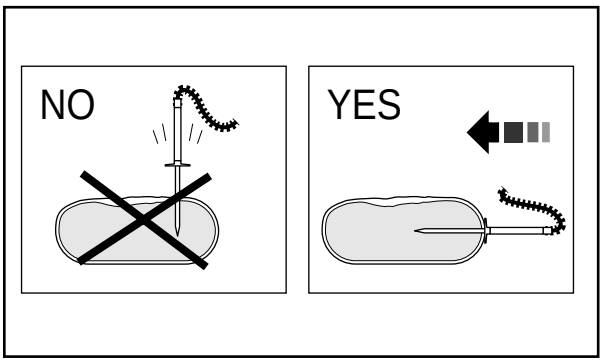
7 • HINTS ON USING THE CORE PROBE (version X only)

In cooking with this device, the position of the core probe is extremely important. The probe must be positioned from the top downwards at the centre of gravity of the food to cook and be fully inserted. In pieces whose thickness is less than twice the probe, it is inserted horizontally to the tabletop so that the tip of the probe is anyhow in the middle of the food (see figure).

It is also recommended that the probe be inserted with the food positioned at the centre of the oven.





Cooking with the core probe is ideal for:

- large items that require cooking in a particular way at the core (roast-beef, salmon, etc.);
- cooking vacuum-packed products (using the needle probe, optional).

Optional: *On request and without any specific adaptation, it is possible to connect the needle probe to the front panel to control the temperature of vacuum-packed foods.*

Advantages

- Improves control over the cooking process, eliminating the risk of loss and waste;
- Permits accurate cooking irrespective of the quality or mass of the product;
- Saves time because cooking control is automatic;
- Guarantees hygiene; with precision monitoring of the core temperature, there is no need for food to be handled, poked or prodded.

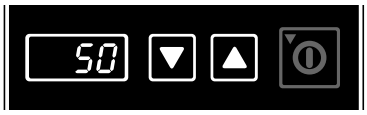
8 • OPERATION OF THE HOLDING CABINET

Note: For MG A.. models only.
These appliances are also equipped with a holding cabinet; the compartment beneath is fitted with a door and electric heating that permits maintaining a constant temperature of between 50 and 75 °C.

OPERATIONS

8.1 • SWITCH ON

When the oven is powered up with the main switch upstream from the appliance, the LED comes on associated with key ⏻. To switch on the cabinet press the key ⏻. The display shows the actual temperature in the holding cabinet.



8.2 • SET

Using keys ▼▲ set the required holding temperature. The display will indicate the selected temperature blinking for a few seconds, then returning to show the actual temperature.

8.3 • DISPLAY THE SET VALUE

Briefly press one of the keys ▼▲: the display will show the previously set temperature for a few seconds and then automatically go back to showing the actual temperature.

8.4 • SWITCH OFF

Press key ⏻.

Advice

Food can of course only be kept warm for a limited period of time, which must not exceed current health and hygiene regulations.

9 • PRACTICAL ADVICE

9.1 • PREHEATING THE OVEN

The oven preheating phase is extremely important and useful for successful cooking.

As a general rule, always preheat the oven when empty, setting the temperature approx. 20% higher than that to be utilized subsequently in cooking.

In the case of steam cooking, preheat the empty oven using convection mode as this will allow temperatures of over 100°C to be selected.

9.2 • COOKING LOADS

The depth of the pan must be suitable for the height of the food.

For uniform cooking it is preferable to distribute the load over several shallow pans rather than loading just one extremely deep pan.

Keep to the weights specified in the following table:

Model	No. pans	Load per pan	Maximum oven load
ME 106. **MG 106. / MG A06.**	6 x GN 1/1	4 kg	24 kg
ME 110. **MG 110. / MG A10.**	10 x GN 1/1	4 kg	40 kg
ME 210. **MG 210. / MG A21.**	10 x GN 2/1	8 kg	80 kg
ME 211. **MG 211. / MG A22.**	20 x GN 1/1	4 kg	80 kg
ME 227. **MG 227.**	2 x 8 x GN 2/1	8 kg	2 x 64 kg
ME S20. / ME C20. **MG S20. / MG C20.**	20 x GN 1/1	4 kg	80 kg
ME S24. / ME C24. **MG S24. / MG C24.**	12 x GN 2/1 24 x GN 1/1	8 kg 4 kg	96 kg
ME S40. / ME C40. **MG S40. / MG C40.**	20 x GN 2/1 40 x GN 1/1	8 kg 4 kg	160 kg

Note: When loading the oven you should clearly consider not only the weight of the product, but also its size, firmness and thickness.

9.3 • FROZEN/DEEP-FROZEN PRODUCTS

The oven must be preheated and loaded respecting the quality and nature of these foods. For example, frozen spinach must not be hit with temperatures that are too high as, due to its nature, it could dry out on the outside and impair the result.

9.4 • TYPES OF CONTAINER

For optimum results, it is vital to use the right pan for the different kinds of food: aluminium or aluminium plate pans for confectionery and baked foods, perforated pans for steam cooking, mesh pans for pre-fried potatoes.

9.5 • CLEARANCE BETWEEN CONTAINERS

When loading the oven with the food to cook, it is recommended to pay special attention there is sufficient clearance between containers. This makes it possible for the heat and air to distribute evenly for a more uniform result, which would not be possible if the food in one pan were in contact with the pan above.

9.6 • LESS SEASONING

By using this type of oven it is possible to virtually eliminate the use of seasoning, oil, butter, fat and flavouring. Minimizing the use of such ingredients in cooking, the natural flavours of the food are highlighted and the nutritional content remains intact, bringing the benefits of a more diet-conscious type of cuisine.

10 • DAILY CLEANING

10.1 • THOROUGH CLEANING ...

... is a prerequisite for faultless cooking and better yields:

- the food's own flavour remains unchanged;
- during operation, there are no fumes caused by previous remains of food that burn;
- energy savings;
- less maintenance work and a longer service life;
- in addition, the simplicity of the procedure means that a thorough clean can be carried out in just a few minutes:
  - 5 minutes approximately to spray clean
  - 10 minutes steam cycle
  - rinsing
  - drying

10.2 • WARNING

Never use direct or high-pressure jets of water to clean the outside of the oven.

Never use corrosive and/or abrasive substances on steel surfaces, and avoid scouring or scrubbing with steel wool or wire brush, as irreparable damage could occur. Similarly, **aggressive detergents** of non-alkaline formulation containing high percentages of sodium and ammonia **can** soon damage the seals, jeopardizing oven efficiency and operation.

The outside of the oven is washed with a sponge and warm water with an ordinary detergent suited to the purpose.

10.3 • CLEANING THE OVEN ...

... at the end of work, proceed as follows:

1 • with the mode selector positioned on cooling with the door open **(45)**, allow the oven to cool down to approximately 60 °C. If the oven is cold, preheat the chamber with steam up to 60 °C;

2 • remove any cooking spills, using a spatula that will not scratch the steel surface;

3 • spray the inside with a proprietary oven cleaner. Use a non-corrosive alkaline product;

4 • close the door and allow the chemical to act for the time indicated by the manufacturer (generally between 5 and 10 minutes);

5 • switch on the oven, in steam mode, for 4 to 10 minutes. Switch off the appliance completely and open the oven door slowly;

6 • rinse the oven thoroughly with plenty of clean water and wipe the door seals with a sponge. The use of a hand-held shower (optional) is recommended;

7 • switch on again, and select a convection cycle of about 5 minutes duration;

8 • stop and shut off all utilities (electricity, water and gas, if connected).

Leave the door slightly ajar when the appliance is not in use.

11 • ROUTINE MAINTENANCE

11.1 • PERIODICALLY ...

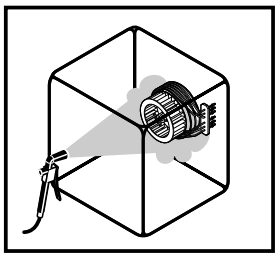
... the deflector and pan racks should be cleaned as required.

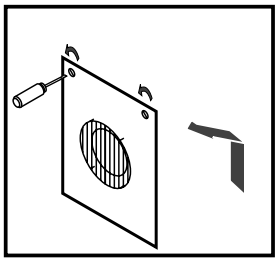
In this connection, proceed as follows:

- Stop and shut off all utilities (electrical power supply, water, and gas if connected);
- take out the pan racks;
- unscrew the deflector screws with the right sized screwdriver;
- remove the deflector and wash thoroughly under running water or in a dishwasher;
- for best results when washing and rinsing the oven, the use of a hand-held shower (optional) is recommended;
- dry with a clean cloth;
- refit the deflector and secure in place with the two screws.

11.2 • PROLONGED IDLE PERIODS

If the oven is to stand idle for any length of time (e.g. holidays or seasonal closing) it must be cleaned thoroughly, leaving no traces of food or dirt. Leave the door slightly ajar so that air can circulate inside the oven. Be absolutely certain to shut off all utilities (electrical power supply, water, and gas if connected). For added care after cleaning, the external surfaces can be protected by applying a proprietary metal polish.





12 • DESCALING THE BOILER

The operation of descaling the steam generator should normally be carried out in the morning, before running normal cooking cycles, with the appliance unheated and already clean (see the *"Daily cleaning"* heading). The frequency of this operation depends on the hardness of the water used in the boiler and the number of hours operation.

The formation of scale will fur up the steam generator and ultimately jeopardize its smooth operation!

To maintain the appliance in optimum working condition, the boiler should be descaled after every 200 hours operation at least. If this operation is not carried out at the prescribed intervals, the performance of the oven will be noticeably affected. In this event, descale the boiler without delay before too much damage is done.

OPERATIONS

12.1 • PUTTING IN THE DESCALER

1 • Shut off the softened water with the tap upstream, which supplies the boiler and humidifier.

2 • Switch on the oven with the main switch, turning the cooking mode selector **(41)** onto convection **(42)**. Wait for the water in the boiler to be completely drained and check water comes out of the drain pipe.

3 • After approximately 5 minutes, remove the cap "**A**".

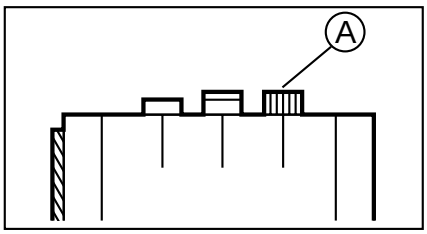
4 • Pour in the descaler (the dilution per litre, if necessary, should be done according to the manufacturer's instructions) taking into account the boiler capacity (see table on page 14).

12 • DESCALING THE BOILER

OPERATIONS

Models	Litres
ME 106.	3.3
MG 106.	9
MG A06.	9
ME 110.	9
MG 110.	9
MG A10.	9
ME S20.	14
ME C20.	14
MG S20.	11
MG C20.	11
ME S24.	14
ME C24.	14
MG S24.	11

Models	Litres
MG C24.	11
ME 210.	14
ME 211.	14
MG 210.	14
MG 211.	14
MG A21.	14
MG A22.	14
ME S40.	21
ME C40.	21
MG S40.	29
MG C40.	29
ME 227.	9 + 9
MG 227.	9 + 9



5 • Close cap "**A**".

12.2 • DESCALING ACTION

6 • Turn on the water tap. The boiler fills to capacity with water.

7 • Wait for approximately 5 minutes for the boiler to fill.

8 • Switch off the appliance and leave it to stand so that the descaling agent acts for the time indicated by the manufacturer, generally at least 2 hours.

12.3 • RINSE CYCLE

9 • After this time, switch the oven on in steam mode **(43)**. The boiler will empty; check that the boiler drains freely, otherwise contact a Lainox service technician as the drain outlet may be blocked, in which case the boiler requires professional attention.

10• Set a temperature of 100 °C **(18)** and a time of 30 min **(21)**.

This cycle serves to clean the boiler and the steam distribution system of the more stubborn particles of scale.
It is recommended to rinse the boiler at least twice.

Warning:
This operation should only be carried out under strict supervision by the operator!
The operator must meticulously follow the directions for the product being used as regards safety precautions (face-mask, gloves, etc.)!

13 • MAJOR SERVICING

13.1 • To ensure correct and safe operation, the oven must be inspected and serviced at least once a year by a Lainox technician or authorized service agent.

13.2 • **With this in mind, customers are recommended to sign a service agreement.**

14 • WHAT TO DO IF...

This heading gives a summary of the faults that can be remedied by the user, or of situations that do not jeopardize safety.

14.1 • ... the power indicator does not light up when the cooking mode selector is turned. **Check** that the isolating switch between the appliance and the electrical power supply has been turned on, and in the case of gas models, that the gas shutoff valve is open.

14.2 • ... no steam is generated in the oven when steam cooking mode has been selected. **Check** that the water shutoff valve is open, and in the case of gas models, that the gas shutoff valve is open.

14.3 • ... the convection system does not work, the oven does not heat up after selecting and switching on. **Check** that the door is properly shut.

WARNING FOR GAS MODELS (MG 106, MG A06, MG 110, MG A10, MG 210/211, MG A21/A22 AND MG 227)
Gas appliances are fitted with ignition devices incorporating a manual reset function. If the burner fails to light, the temperature in the oven will not rise, and the key **(40)** lights up. Press the key. This simple remedy will reset the ignition. If the fault persists, contact a Lainox technician or authorized service agent.

WARNING FOR GAS MODELS (MG 20, MG 24 and MG 40)
Gas appliances are fitted with ignition devices incorporating an automatic reset function. If the burner fails to light, the temperature in the oven will not rise; it is therefore necessary to open the door, keep it open for 60 sec., then close it again. This simple remedy will reset the ignition. If the fault persists, contact a Lainox technician or authorized service agent.

14.4 • CORE PROBE FAULT INDICATION
If, when using the core probe, the **[err]** message appears on the display **(25)**, check that the connector is plugged properly into the panel socket. If the message continues to be displayed, contact a Lainox technician or authorized service agent.
The oven can still be used without the core probe.

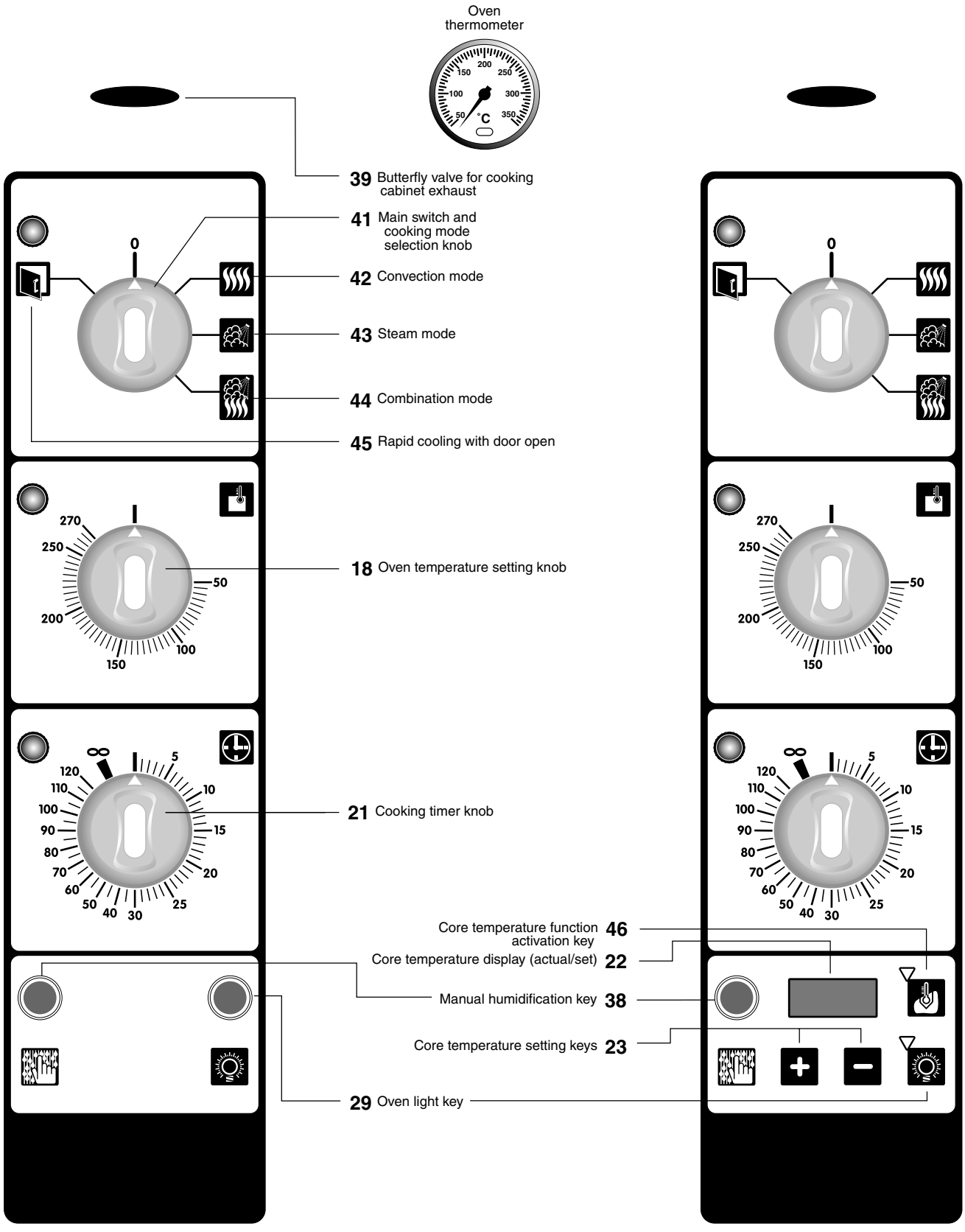
If, after carefully carrying out these checks, the appliance still does not function properly, call a Lainox technician or authorized service agent.

Note: *When contacting Lainox service technicians, try to explain the fault in as much detail as possible, referring all the information indicated on the identification data plate (see page 3).*

NOTES

DESCRIPTION OF THE DISPLAYS AND KEYS

VERSION M	DISPLAYS, KNOBS AND KEYS	VERSION X


Oven thermometer
39 Butterfly valve for cooking cabinet exhaust
41 Main switch and cooking mode selection knob
42 Convection mode
43 Steam mode
44 Combination mode
45 Rapid cooling with door open
18 Oven temperature setting knob
21 Cooking timer knob
Core temperature function activation key 46
Core temperature display (actual/set) 22
Manual humidification key 38
Core temperature setting keys 23
29 Oven light key
Core probe connection 36
Core probe
40 Only for gas ovens: Button for burners re-starting